

We claim:

1. A starch that is a thermally inhibited, non-pregelatinized, granular starch.
2. The starch of claim 1, in which the starch is a cereal, root, tuber, legume or fruit starch.
3. The starch of claim 1, in which the starch is a native granular starch selected from the group consisting of banana, corn, pea, potato, sweet potato, barley, wheat, rice, ~~sago~~, amaranth, tapioca, sorghum, V.O. hybrid waxy maize, waxy maize, waxy rice, waxy barley, waxy potato, waxy sorghum, and a starch containing greater than 40% amylose.
4. The starch of claim 1, in which the starch is an unmodified starch.
5. The starch of claim 1, in which the starch is a modified starch.
6. The starch of claim 5, in which the starch is a converted starch.
7. The starch of claim 5, in which the starch is a derivatized starch.
8. The starch of claim 5, in which the starch is a chemically crosslinked starch.

9. The starch of claim 1, made by a process in which the starch is dehydrated to substantially anhydrous state and heat treated, for a time and at a temperature and pH, sufficient to inhibit the starch.

5 10. The starch of claim 9, in which the starch is dehydrated to anhydrous.

11. The starch of claim 9, in which the heat treatment is at a temperature of 100°C or greater.

12. A process for making a thermally inhibited, non-pregelatinized granular starch comprising:

- 10 (a) dehydrating the starch to substantially anhydrous, and
(b) heat treating the substantially anhydrous starch at a temperature of 100°C or greater for a period of time effective to inhibit the starch.

15 13. A process for making a thermally inhibited, non-pregelatinized granular starch comprising:

- (a) raising the pH of the granular starch to neutral or greater,
(b) dehydrating the starch to substantially anhydrous, and
(b) heat treating the substantially anhydrous starch at a temperature of 100°C or greater for a period of time
20 effective to inhibit the starch.

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14. The process of claim 13, in which the pH is raised to greater than
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~~15.~~ The process of claim ~~13~~² or ~~14~~⁴⁶³~~3~~ further comprising the step of washing the thermally inhibited, granular starch after the heat treating step.

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~~16.~~ The process of claim ~~12~~¹ or ~~13~~² in which the dehydrating and heat treating steps occur simultaneously.

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~~17.~~ The process of claim ~~12~~¹, ~~13~~², or ~~16~~⁵ in which the starch is dehydrated and heat treated in a fluidized bed reactor.

18. A flour that is a thermally inhibited, non-pregelatinized, granular flour.

19. The flour of claim 18, in which the flour is a cereal, root, tuber, legume or fruit flour.

20. The flour of claim 19, in which the flour is a native granular flour selected from the group consisting of banana, corn, pea, potato, sweet potato, barley, wheat, rice, sago, amaranth, tapioca, sorghum, V.O. hybrid waxy maize, waxy maize, waxy rice, waxy barley, waxy potato, waxy sorghum, and a flour containing greater than 40% amylose

21. The flour of claim 18, in which the flour is an unmodified flour.

22. The flour of claim 18, in which the flour is a modified flour.

23. The flour of claim 22, in which the flour is a converted flour.

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24. The flour of claim 22, in which the flour is a derivatized flour.
25. The flour of claim 22, in which the flour is a chemically crosslinked flour.
26. The flour of claim 18, made by a process in which the flour is
5 dehydrated to substantially anhydrous state and heat treated, for a time
and at a temperature and pH, sufficient to inhibit the flour.
27. The flour of claim 26, in which the flour is dehydrated to
anhydrous.
28. The flour of claim 26, in which the heat treatment is at a
10 temperature of 100°C or greater.
29. A process for making a thermally inhibited, non-pregelatinized
granular flour comprising:
- (a) dehydrating the flour to substantially anhydrous, and
 - (b) heat treating the substantially anhydrous flour at a
15 temperature of 100°C or greater for a period of time
effective to inhibit the flour.
30. A process for making a thermally inhibited, non-pregelatinized
granular flour comprising:
- (a) raising the pH of the granular flour to neutral or greater,
 - 20 (b) dehydrating the flour to substantially anhydrous, and

- (b) heat treating the substantially anhydrous flour at a temperature of 100°C or greater for a period of time effective to inhibit the flour.

5 31. The process of claim 30, in which the pH is raised to greater than 8.

32. The process of claim 30 or 31, further comprising the step of washing the thermally inhibited granular flour after the heat treating step.

10 33. The process of claim 29 or 30 in which the dehydrating and heat treating steps occur simultaneously.

34. The process of claim 29, 30, or 33 in which the flour is dehydrated and heat treated in a fluidized bed reactor.